



A.D. 1874, 10th FEBRUARY. N^o 519.

SPECIFICATION

OF

CHARLES HIPPOLYTE TOUAILLON.

STOPPING TEETH.

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Stopping Teeth.

LETTERS PATENT to Charles Hippolyte Touaillon, of Paris, in the Republic of France, Civil Engineer, for the Invention of "IMPROVEMENTS IN APPARATUS FOR STOPPING TEETH."—A communication from Louis Jean Paul Eugène Gaillard, residing at No. 72, Boulevard Sébastopol, Paris, France, D.M., Surgeon Dentist.

Sealed the 7th August 1874, and dated the 10th February 1874.

COMPLETE SPECIFICATION filed by the said Charles Hippolyte Touaillon at the Office of the Commissioners of Patents, with his Petition and Declaration, on the 10th February 1874, pursuant to the 9th Section of the Patent Law Amendment Act, 1852.

5 TO ALL TO WHOM THESE PRESENTS SHALL COME, I, CHARLES HIPPOLYTE TOUAILLON, of Paris, in the Republic of France, Civil Engineer, send greeting.

WHEREAS I am in possession of an Invention for "IMPROVEMENTS IN APPARATUS FOR STOPPING TEETH," communicated to me by Louis Jean Paul
10 Eugène Gaillard, a person resident at No. 72, Boulevard Sébastopol, Paris, France, D.M., Surgeon Dentist, and have petitioned Her Majesty to grant unto me, my executors, administrators, and assigns, Her Royal

Touaillon's Improvements in Apparatus for Stopping Teeth.

Letters Patent for the same, and made solemn Declaration that it is a communication.

NOW KNOW YE, that I, the said Charles Hippolyte Touaillon, do hereby declare that the following Complete Specification under my hand and seal, fully describes and ascertains the nature of the Invention, and 5 the manner in which the same is to be performed, reference being had to the accompanying Drawings, and to the figures and letters marked thereon, that is to say:—

The Invention relates to new and improved apparatus for stopping teeth with lead, and especially with gold, by means of which the fatigue 10 for the operator and the pain for the patient produced by the instruments now in use are prevented.

When the triturating fore and back sides of the teeth are spoiled (provided that the latter press upon the triturating sides), a new and improved condenser is used, as illustrated at the scale of working size in 15 the Figures A, B, C, and three times larger than the working size in the Figures D and E. This instrument consists of a handle F provided at its end with a straight or bent cap G, on the convex surface of which a metal pin H is screwed, whilst a disk I of wood, leather, india-rubber, or other suitable soft material is inserted in the concave face, as shown in 20 Fig. D and E.

When the hollow tooth has been filled with the metal, the metal pin H is placed upon the latter, the patient set one's teeth and press upon the disk I as strongly and as often it is required, in order to fill 25 thoroughly the hollow and to sufficiently condense the metal, so that much thicker metal layers may be used, and a much larger surface is compressed than by the condensers heretofore used, which require a great muscular power without obtaining the necessary pressure, especially to stop with gold.

The instrument is guided and the point M is displaced as wished by 30 the operator. The metal pin H may be removed and replaced by other pins, whose ends are denticulated or smooth, as required. By setting one's teeth the patient cuts the edges of the hollow, if necessary, compresses and burnishes the metal without weariness. The operation is also more quickly made. This is of great consequence when the luxuriant 35 saliva prevents a good stopping by ordinary means.

Touaillon's Improvements in Apparatus for Stopping Teeth.

The above-described instrument may be used instead of the ordinary mallet, by means of which the gold is condensed or compressed.

To stop the sides of the teeth pincers J are used, which produce the same effects as the above-described condenser for the triturating sides.
5 These pincers make up a powerful lever, by means of which the muscular power of the operator, insufficient especially by stopping with gold, is increased. They are chiefly useful for the teeth which being very weak hardly sustain the brutish stroke of the mallet. A sufficient pressure to compress the metal may not be attained by using the key or crow now
10 in use, the moveable ends of which being but inserted into sockets in handles. The ends of the above improved pincers being cast together with the handles the pressure will be as energetic as the muscular power displayed, and at the same time the tooth will be sustained and not shaken.

15 In the Figures K, L, M, N, O, P, Q, several pincers' branches are shown, which may be connected one with each other by means of a moveable pin, according to required operation, and form pincers similar to those illustrated in Fig. J.

It will be understood that two equal pressures in a contrary direction
20 will be produced, which condense the metal without shaking the tooth.

The branches shown in the Drawings are given as an example, but their shapes may be modified according to the cases.

Instead of the ordinary mallet to condense or compress the several metals, especially the gold used for stopping teeth, a self-acting percutor
25 is used, which is more convenient. Indeed, during the operation one hand of the operator is free, the other keeping the patient in the required position. A suitable instrument operated by a single hand was desired. The percutor shown in the Fig. R fulfils this object. The lower end S of the stopper T, the shape and size of which may be modified, is set on
30 the metal to be condensed, and pressed every time that it is necessary to strike. When the cylindrical rod V, W, is raised by compressing the spiral spring X, and lifting the spring Y attached to the cylindrical hammer Z, until the spring being too much compressed becomes slack and escapes the shoulder *a*. The hammer Z under the action of the
35 spiral spring *e* falls down with strength upon the head *b* of the rod V, W. The metal is stricken, and afterwards the different parts of the instrument

Touaillon's Improvements in Apparatus for Stopping Teeth.

return at their first position, and the spring stretches after each stroke. The stroke is more or less strong by turning from left to right, or vice versa, the head *c*, the position of the disk *d* being thus altered, and consequently the degree of tension of the spiral spring *e*. The power of the stroke may beforehand be regulated by means of the graduated scale *f*, according as the operation requires.

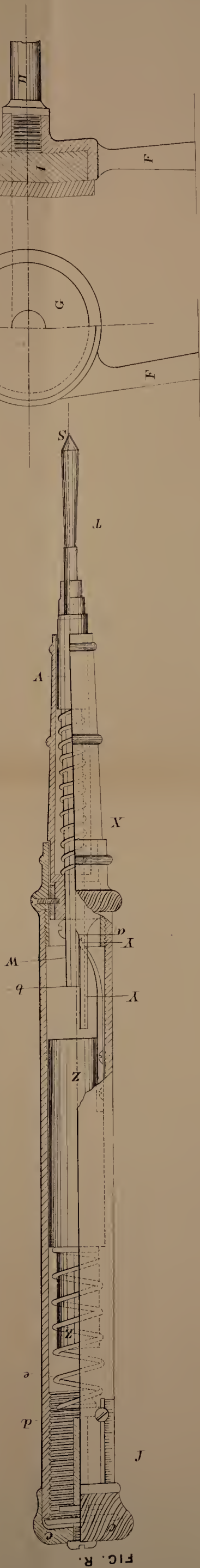
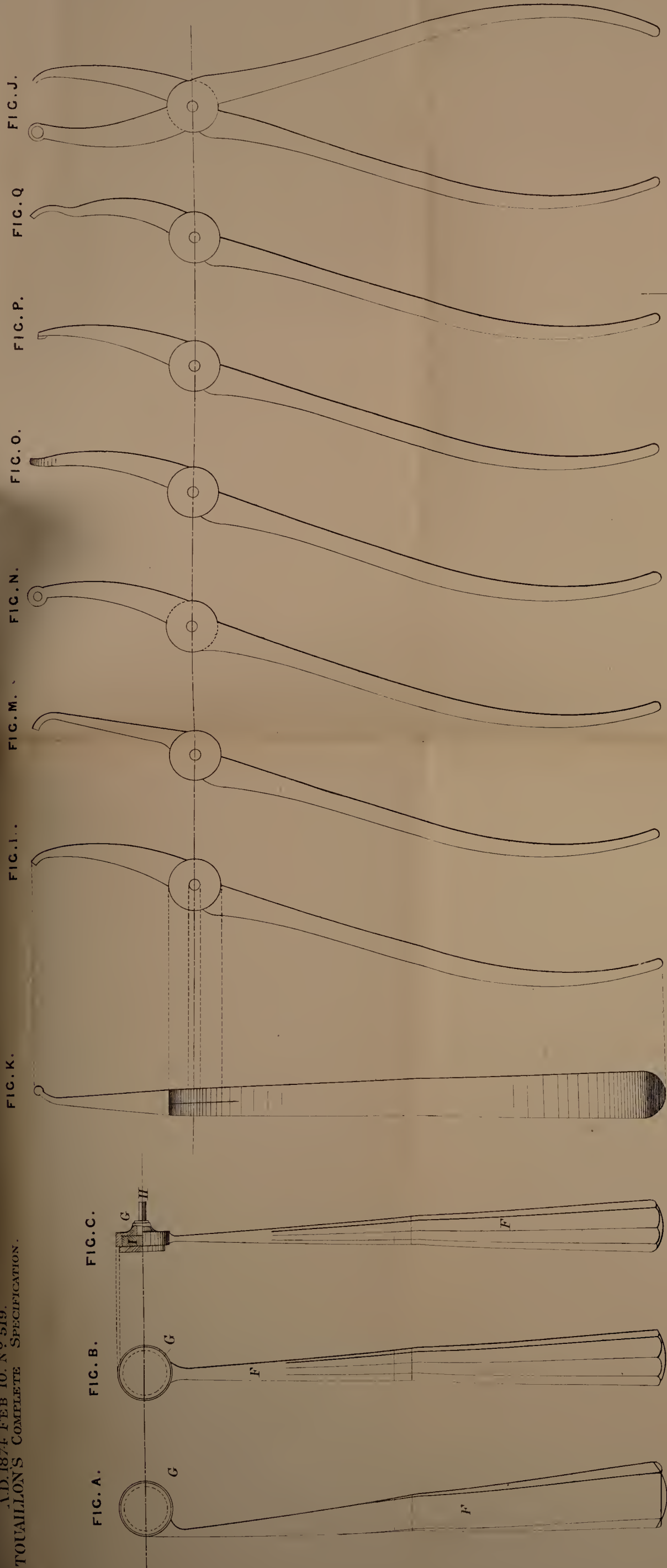
Having thus described the said Invention, and the manner of carrying it into effect, I wish to be understood that I do not confine myself to precise details above enumerated, as these may obviously be modified without departing from the principle of the Invention; but what I claim and desire to secure by the Letters Patent is, the new and improved apparatus for stopping teeth with a suitable metal, substantially as above described and illustrated in the accompanying Drawings.

In witness whereof, I, the said Charles Hippolyte Touaillon, have hereto set my hand and seal, this Fourth day of February, in the year of our Lord Eighteen hundred and seventy-four.

C. H. TOUAILLON. (L.S.)

LONDON:

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Printers to the Queen's most Excellent Majesty. 1874.



The drawing left with Provisional Specification is not colored.

Drawn on Stone by Malby & Sons

